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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,393	08/02/2001	Ole Droz	112740-273	5984
29177	7590	06/06/2006		
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			EXAMINER HAILE, FEBEN	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/921,393	DROZ, OLE	
	Examiner	Art Unit	
	Feben M. Haile	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Amendment

1. In view of applicant's amendment filed March 30, 2006, the status of the application is still pending with respect to claims 1-19.

2. The amendment filed is insufficient to overcome the rejection of claims 1-19 based upon Shankar et al (US 6,768,733) as set forth in the last Office action because:

Regarding claims 1, 2, and 17-19, the addition "wherein at least one of the line units uses a different external signaling protocol as compared to the other line units; using a different external signaling protocol; wherein the internal signaling identities an appropriate line unit for passing on signaling messages given the protocol that is required" fails to further limit the scope of the claim to overcome the applied prior art. Shankar discloses an originating signaling unit 120 and a terminating signaling unit 140 each comprising three components referred to as an originating call control (OCC) 122, a universal call model (UCM) 124, and a terminating call control (TCC) 126. The originating call control (OCC) 122, converts signaling messages between the protocol of the originating side, for example, DPNSS, and a non-protocol specific universal protocol. The universal call model (UCM) 124, handles calls in the converted universal protocol and arranges for messages to be routed. The terminating call control (TCC) 126, after routing analysis has determined the route, converts signaling messages between the universal protocol and the protocol that provides connectivity to the terminating signaling unit 140, which may be different from the protocol of the

terminating node 160. For the example, the protocol of the terminating signaling unit can be an extension of Integrated Services Digital Network User Part (ISUP), described in more detail hereinafter and referred to as "XISUP", while the protocol of the terminating node 160 is a legacy protocol such as DPNSS (**column 5 lines 25-60**).

Oath/Declaration

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: the date stated for prior foreign application(s) does not correspond to the date on the certified copy of the priority document.

Drawings

4. The drawings are objected to because: according to the specifications on page 12 lines 5-7, in figure 2 the link between units "106 and "112" should be labeled "110" instead of "108". Furthermore the drawings submitted with the amendment filed March 30, 2006 incorrectly replaced link "108" between units "116" and "106" with "110" and are also in another language. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Shankar et al. (US 6,768,733), hereinafter referred to as Shankar.

Regarding claims 1 & 19, Shankar discloses the limitations: providing a signaling unit having at least two line units which can be connected to one another and which can be used to set up a connection for transmitting user data (**figure 1 units 120, 122, 124, and 126; column 4 lines 19-23, and column 5 lines 25-32; an originating signaling unit, comprised of components OCC, UCM, and TCC, is responsible for setting up a voice connection**); transmitting the user data in data packets via network nodes of a network (**column 3 lines 29-33, voice data produced by the originating node is converted into packets for a packet-switching network**); terminating, via the line units, signaling toward a terminal device involved in the data transmission (**column 13 lines 56-61; the TCC of the originating signaling unit transmits an XISUP IAM message to a terminating signaling unit**); and passing on signaling messages, arriving at one of the line units for switching of the data packets, to another of the line units with the aid of internal signaling messages defined for the signaling unit (**column 13 lines 8-12; the OCC outputs an internal CALL message to the UCM**).

Regarding claim 2, Shankar discloses the limitations: providing a signaling unit having at least two line units which can be used to set up a connection for transmitting data (**figure 1 units 120, 122, 124, and 126; column 4 lines 19-23; column 5 lines 25-32; an originating signaling unit, comprised of components OCC, UCM, and TCC, is responsible for setting up a voice connection**); transmitting the user data in data packets via network nodes of a network (**column 3 lines 29-33, voice data produced by the originating node is converted into packets for a packet-switching network**); terminating, via the line units, signaling toward a terminal device

involved in the data transmission in accordance with a signaling protocol of circuit-switched transmission of user data (**column 13 lines 56-61; the TCC of the originating signaling unit transmits an XISUP IAM message to a terminating signaling unit**); and passing on signaling messages, arriving at one of the line units for switching of the data packets, to another of the line units with the aid of internal signaling messages defined for the signaling unit (**column 13 lines 8-12; the OCC outputs an internal CALL message to the UCM of the signaling unit**).

Regarding claim 3, Shankar discloses the limitations: wherein the line units can be connected to each other (**figure 1 unit 120, 122, 124, and 26; column 13 lines 8-12; the OCC, UCM, and TCC of the originating signaling unit send messages to each other; it is inherent that in order for these components to communicate, they have to be connected to each other in some type of manner**).

Regarding claim 4, Shankar discloses the limitations: wherein the line units can be connected via a switching network which transmits the internal signaling messages via one of channels, a bus system and a data network (**figure 1 units 120, 140 and 132; column 12 lines 55-59; the originating signaling unit, which include OCC, UCM and TCC, transmit messages through a network to the terminating signaling unit, which also includes an OCC, UCM and TCC**).

Regarding claim 5, Shankar discloses the limitations: controlling the connection of the line units according to a connection destination (**column 13 lines 13-15; the internal CALL message from the OCC to the UCM includes a destination number**).

Regarding claim 6, Shankar discloses the limitations: using at least one signaling message to transmit an information element, wherein the information element contains at least one of an address at which one of the terminal device and a network inter-working unit can receive data packets on the terminal device side (**column 13 lines 13-15; the internal CALL message from the OCC to the UCM includes a destination number**); a port number which designates a receiving unit of one of the terminal device and the network inter-working unit (**column 13 lines 36-40; a CRCX message includes a port number**), and a coding identification which designates a type of coding used sending data packets to one of the terminal device and the network inter-working unit (**column 13 lines 44-48; the CRCX message indicates encoding capabilities of the originating coding unit**).

Regarding claim 7, Shankar discloses using further line units for switching user data in a circuit-switched network (**figure 1 units 140, 142, 144, and 146; column 4 lines 19-23, and column 5 lines 25-32; the terminating signaling unit, also comprised of components OCC, UCM, and TCC, is responsible for a voice connection**); and processing, via the further line units, at least similar internal signaling messages as the line units involved in setting up the connection for the transmission of user data packets (**column 13 line 62-column 14 line 5; upon receipt of an XISUP IAM message from the originating signaling unit, the terminating signaling unit issue a CRCX message**).

Regarding claim 8, Shankar discloses the limitations: wherein at least one of the line units involved in the connection set up operates toward the outside in

accordance with an ISUP protocol (**column 13 lines 56-61; the TCC of the originating signaling unit transmits an XISUP IAM message to the terminating signaling unit**).

Regarding claim 9, Shankar discloses the limitations: wherein at least one of the line units involved in the connection set up operates toward the outside in accordance with a supplemented ISUP protocol (**column 13 lines 56-61; the TCC of the originating signaling unit transmits an XISUP IAM message to the terminating signaling unit**), and the process further comprises the step of using at least one information element for transmitting at least one of an address at which one of the terminal device and a network inter-working unit in the packet-switched network can receive data packets (**column 13 lines 13-15; the internal CALL message from the OCC to the UCM includes a destination number**), a port number which designates a receiving unit of one of the terminal device and the network inter-working unit (**column 13 lines 36-40; a CRCX message includes a port number**), and a coding identification which designates a type of coding used when sending data packets to one of the terminal device and the network inter-working unit (**column 13 lines 44-48; the CRCX message indicates encoding capabilities of a originating coding unit**).

Regarding claim 10, Shankar discloses the limitations: wherein at least one of the line units involved in the connection set up terminates the signaling in accordance with a signaling protocol for a packet- transmitting data network device (**column 13 lines 27-28; the UCM generates the (CRCX)**).

Regarding claim 11, Shankar discloses the limitations: wherein the signaling protocol is a protocol for signaling with a terminal device, the protocol being one of an

H.323 protocol, an SIP protocol, and an MGCP protocol (**column 4 lines 26-31; the signaling unit converts protocols, such as H.323 and SIP, into messages for communications**).

Regarding claim 12, Shankar discloses the limitations: transmitting data packets, via the signaling protocol, on a lower protocol layer (**column 13 lines 55-59; the TCC generates an XISUP IAM message; it is inherent that ISUP is a lower layer protocol**); and, transmitting signaling messages, via the signaling protocol, originally defined for a circuit-switch transmission network on an upper protocol layer (**column 13 lines 27-28; the UCM generates a CRCX message; it is inherent that CRCX is a RFC2705 standard, which is a higher layer protocol**).

Regarding claim 13, Shankar discloses the limitations: wherein at least one of the line units involved in the connection set up involves a control unit and a network inter-working unit in the switching operation (**column 12 lines 50-58; an originating coding unit sends a connection request to the originating signaling unit, where a controller receives it**), and wherein, in the network inter-working unit, after the connection set up, at least one event occurs between removing the user data of the connection from time slots and distributing the user data among data packets (**column 3 lines 54-58; the originating coding unit receives a voice call, extracts signaling data, time stamps it, and packages it into IP or ATM packets**), and disassembling the user data of the connection from received data packets and passing the user data on in time slots (**column 12 lines 50-58; the controller receives the connection message, unpacks it into protocol data units and submits it**).

Regarding claim 14, Shankar discloses the limitations: wherein the at least two line units involve different control units (**figure 3 units 302, 304, and 306; the OCC, UCM, and TCC have their own controllers**).

Regarding claim 15, Shankar discloses the limitations: wherein one line unit contains at least two component units which exchange internal signaling messages with one another (**figure 3 units 302, 304, 306, 312, 314, and 316; column 8 lines 19-22; column 8 lines 42-44; the OCC, UCM, and TCC each have their own controller and protocol adapter for handling messages**).

Regarding claim 16, Shankar discloses the limitations: wherein the user data are passed on in one of a connection list mode by network nodes of the packet-transmitting network in accordance with an IP protocol (**figure 1 unit 130 and column 3 lines 18-20; the network can be implemented as an IP**), and a connection-oriented mode by the network nodes of the packet-transmitting network in accordance with the ATM protocol (**figure 1 unit 130 and column 3 lines 18-20; the network can be implemented as an ATM**).

Regarding claims 17 & 18, Shankar discloses the limitations: at least two line units which are used to set up a connection for transmitting user data in data packets (**figure 1 units 120, 122, 124, and 126, column 4 lines 19-23, and column 5 lines 25-32; the originating signaling unit, comprised of components OCC, UCM, and TCC, is responsible for setting up a voice connection**); and at least one terminal device wherein the line units terminate signaling toward one of the terminal devices involved in the data transmission (**column 13 lines 56-61; the TCC of the originating signaling**

unit transmits an XISUP IAM message to the terminating signaling unit), and signaling messages arriving at one of the line units are passed on to the other of the line units with the aid of internal signaling messages defined for the signaling unit (**column 13 lines 8-12; the OCC unpacks a message and outputs an internal CALL message to the UCM).**

Response to Arguments

6. Applicant's arguments filed March 30, 2006 have been fully considered but they are not persuasive.

On page 8 of the amendment, the Applicant respectfully traverses that Shankar does not teach or suggest the features of providing a signaling unit having at least two (or three) line units connected to one another and used to set up a connection for transmitting user data, wherein at least one of the line units uses a different external signaling protocol as compared to the other line units and passing on signaling messages, arriving at one of the at least one line units using a different external signaling protocol for switching of the data packets, to another of the line units with the aid of internal signaling messages defined for the signaling unit, wherein the internal signaling identifies an appropriate line unit for passing on signaling messages given the protocol that is required. The Examiner respectfully disagrees with the Applicant. Shankar teaches a signaling unit having three components OCC, UCM, and TCC connected to one another (**Figure 3 units 322, 324, & 326 and column 5 lines 25-31**), where the universal call model UCM handles calls in a universal protocol and arranges

for messages to be routed (**column 5 lines 37-41**) and the TCC, after routing analysis has determined the route, converts signaling messages between the universal protocol and the protocol that provides connectivity (**column 5 lines 48-53**).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Han (US 20030076817), Apparatus and Method for Interfacing Internet Telephone

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2616

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M. Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 6:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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